various NF-κB binding sites from various genes. A copy of a cloned NF-κB gene can be mutagenized to alter the binding domain by well known techniques, such as site or region directed mutagenesis. Alternatively, DNA fragments encoding a modified NF-κB binding domain can be made synthetically, having appropriate cohesive or blunt termini to facilitate insertion into the NF-κB gene to replace the existing sequences encoding the corresponding portion of the binding domain. Such restriction fragments can be synthesized having any desired nucleotide changes. Mutated proteins encoded by such genes can be expressed and assayed for preferential binding to, for example, one of the 10 different DNA binding sites shown in Table 1 or related members of the family of NF-κB binding sites. An example of an assay which can be used to screen large numbers of recombinant clones in order to identify binding domain mutants is that described by Singh et al., (Cell, 52:415-423 (1988)). Once such a mutant is identified, a DNA expression vector encoding this mutant protein can be introduced into a cell. The mutant protein will preferentially bind to the selected member or members of the family of DNA binding sites, such as those shown in Table 2, thereby preferentially enhancing transcription from only those genes which contain that particular binding site.